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Canada

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D119-796-241TRN
Job Sheet 198193



Part No: D119-796-241TRN

Job Qty: 1 pcs

Part Name: Crosstube Turning Detail



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/23/19

Job Tracking No:

Due Date: 9/2/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RD119-796 REV.K IPP REV A RQ 14/05/27 VERIFIED BY DD IPP REV:B 16.05.04 AS PER DWG REV.I
DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier			
100	Mori Seiki TL-40 - 1	1 pcs		9/2/19	1.00	1.72	Mori Seiki TL-40 - 1			DAS 662019-08-12 9-89
110	QC 2	1 pcs		9/2/19	0.00	0.00	QC 2 - 1			
							QC 2 - 12			
							QC 2 - 14			
							QC 2 - 17			
							QC 2 - 19			
							QC 2 - 2			
							QC 2 - 20			
							QC 2 - 22			
							QC 2 - 23			
							QC 2 - 25			
							QC 2 - 32			
							QC 2 - 33			
							QC 2 - 35			
							QC 2 - 39			
							QC 2 - 4			
							QC 2 - 40			
							QC 2 - 44			
							QC 2 - 45			
							QC 2 - 48			
							QC 2 - 49			
							QC 2 - 50			
							QC 2 - 51			
							QC 2 - 52			
							QC 2 - 57			
							QC 2 - 62			
							QC 2 - 63			
QC 2 - 8				DAS						
QC 2 - 66				662019-08-12						
QC 2 - 64				9-89						

Plex 7/23/19 1:50 PM Dart.lajeunesse.marie

				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
120 Mori Selki TL-40 - 1 - B4B	1 pcs	9/2/19	1.00 1.72	Mori Selki TL-40 - 1 - B4B	DAS 662019-08-14 9-89
130 QC 2	1 pcs	9/2/19	0.00 0.00	QC 2 - 1	
				QC 2 - 12	
				QC 2 - 14	
				QC 2 - 17	
				QC 2 - 19	
				QC 2 - 2	
				QC 2 - 20	
				QC 2 - 22	
				QC 2 - 23	
				QC 2 - 25	
				QC 2 - 32	
				QC 2 - 33	
				QC 2 - 35	
				QC 2 - 39	
				QC 2 - 4	
				QC 2 - 40	
				QC 2 - 44	
				QC 2 - 45	
				QC 2 - 48	
				QC 2 - 49	
				QC 2 - 50	
				QC 2 - 51	
				QC 2 - 52	
				QC 2 - 57	
				QC 2 - 62	
				QC 2 - 63	
				QC 2 - 8	DAS
				QC 2 - 66	662019-08-14
				QC 2 - 64	9-89
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
140 QC 8	1 pcs	9/2/19	0.00 0.00	QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	

				QC 8 - 67	
				QC 8 - 1 (A)	DAS
				QC 8 - 47	47
				QC 8 - 40	9-89
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
145 Crosstubes - 2 - B4B	1 pcs	9/2/19	0.00 0.45	Crosstubes - 1 - B4B	
				Crosstubes - 2 - B4B	33 9/4/2019
				Crosstubes - 3 - B4B	
				Crosstubes - 4 - B4B	
150 Handfinish - 1-1 Chemical-B4B	1 pcs	9/2/19	0.00 0.40	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	SEP 06 2019
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
160 QC 7	1 pcs	9/2/19	0.00 0.00	QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	
				QC 7 - 9	
				QC 7 - 68	2019-11-1 DAS 76 9-89
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	

170 Packaging 3-1 - Stock - B4B	1 pcs	9/2/19	0.00 0.00	QC 7 - 24	
				QC 7 - 43	
				QC 7 - 61	
				QC 7 - 81	
				Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	ISB 2019-11-1
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
180 QC 21 - FG	1 pcs	9/2/19	0.00 0.00	QC 21 - FG - 21	Dag
				QC 21 - FG - 70	21
				QC 21 - FG - 53	9-53

NOV 01 2019

Part Op 100 - 1-Fill tube with sand & install plugs on both ends as per Folio FB298 2-Turn first side as per Folio FB298
 Descriptions: 110 - (QC2- Inspect parts off machine FAI/FAIB)
 120 - 1-Turn second side as per Folio FB298
 130 - (QC2- Inspect parts off machine FAI/FAIB)
 140 - (QC8- Inspect parts - second check)
 145 - GRIND ONLY TRANSITION LINES SMOOTH LONGITUDE WAY.
 150 - 1- Handfinish X-TUBE INSIDE AND OUT. ALODINE AND ACID ETCH X-TUBE AS PER DWG. USE RED SCOTCH BRITE PAD.
 160 - (QC7-Inspect Chemical Conversion Coat)
 170 - (Identify as per dwg & Stock Location: _____) LOCATION : LG014
 180 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation
D6023-106	Crosstube Material	1 pcs (1 ea)	100-Mori Seiki TL-40 - 1

Container
S013837

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Mori Seiki TL-40 - 1	D6023-106	1	14	0
Part Specifications				
Specifications could not be found.				



Container No: S204893



Part: D119-796-241TRN

Job No: 198193

Serial No/Batch: S204893

Revision: K

Inspector:

Exp Date:

Instructions:

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Plex 7/23/19 1:50 PM Dart.lajeunesse.marie

Date: 08/12/19

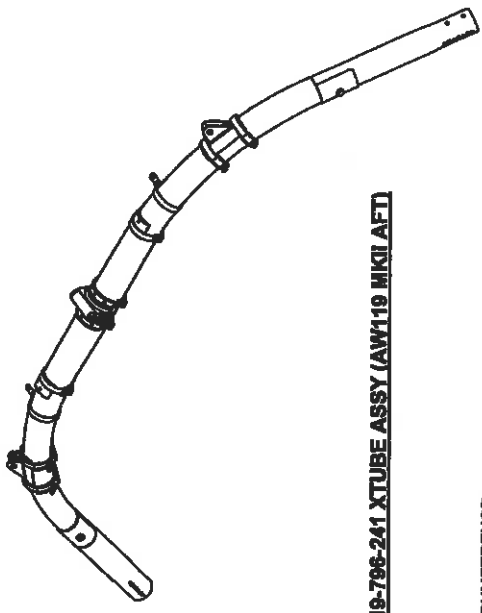
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DART AEROSPACE LTD		Work Order:	198193
Description: Crosstube Assembly (AW119 MKII Aft)		Part Number:	D119-796-241TRN
Inspection Dwg: D119-796-241 Rev: ^{DAS} 35			
		Page 1 of 2	

FIRST ARTICLE INSPECTION CHECKLIST

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	5.88	+/-0.030	5.884	✓		
	2.516	+0.005/-0.000	2.521	✓		
	2.626	+0.005/-0.000	2.631	✓		
	2.627	+0.005/-0.000	2.632	✓		
	2.798	+0.005/-0.000	2.803	✓		
	2.799	+0.005/-0.000	2.804	✓		
	2.989	+0.005/-0.000	2.994	✓		
	3.191	+0.005/-0.000	3.196	✓		
	3.200	+0.005/-0.000	3.205	✓		
SIDE B	5.88	+/-0.030	5.883	✓		
	2.516	+0.005/-0.000	2.521	✓		
	2.626	+0.005/-0.000	2.630	✓		
	2.627	+0.005/-0.000	2.632	✓		
	2.798	+0.005/-0.000	2.803	✓		
	2.799	+0.005/-0.000	2.804	✓		
	2.989	+0.005/-0.000	2.994	✓		
	3.191	+0.005/-0.000	3.196	✓		
	3.200	+0.005/-0.000	3.205	✓		
	105.71	+/-0.020	105.71	✓		

D119-796-241 XTUBE ASSY (AW119 MKII AFT)



NOTES:
1) MATERIAL: N/A
2) FINISH: MASK D5134-041/042 DAMPER SUPPORT ASSEMBLIES, CUFFS, D5138-1/2 CONTACT PADS, THE COMPLETE CIRCUMFERENCE OF THE TUBE UNDER THE D5122-1 CENTER SUPPORT AND THE TAB ON THE D5616-1 GROUNDING CLAMP PRIOR TO APPLICATION OF CLEAR COATPAINT.

IF NECESSARY TOUCH UP PRIMER ON OUTSIDE OF CROSSTUBE PER DART QSI 005 4.2.
 APPLY MATTE CLEAR COAT TO THE UNDERSIDE OF CROSSTUBE AS SHOWN (B4-2, HATCHED AREA) PER QSI 005 4.2.
 MASK THE UNDERSIDE OF CROSSTUBE AS SHOWN (B4-2, HATCHED AREA).

PAINT OUTSIDE PER DART QSI 005 4.2
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY USING PART NUMBER "D19-798-241" AND BATCH NUMBER ON INSIDE OF CUFF PER QSI 044 6.4

7) WEIGHT: 26.26 lbs
8) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM DEFECTS SUCH AS

9) INSTALL D5122-1 CENTER SUPPORT HAND TIGHT ONLY. DO NOT TORQUE. INSTALL RED SCRATCHES, NICKS OR DENTS. DEFECTS UP TO 0.005 MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

10) PRIOR TO FINISHING, ABRASIVE MATING SURFACES OF D6138-1/-2 AND SURFACE OF CROSS-TIE WITH SCOTCH BRITE 7447 RED, AND REMOVE RESIDUE WITH DIABLO.

4105S WASH 'N' WIPE DEGREASER. APPLY A 0.100" MIN THK LAYER OF PROSEAL 890 ON THE INSIDE CONCAVE SURFACE OF THE DB138-1/2 CONTACT PADS AND INSTALL AT AN 8° OFFSET FROM THE CROSSBIE BENDING LINE. INSTALL 1.524020.75

CLAMPS AND D5123-5 CLAMP CUSHIONS WHILE WET. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 880 SEALANT HAS CURED FOR 72 HOURS.

12) PRIOR TO FINISHING, POSITION AND INSTALL D5134-041/042 DAMPER SUPPORTS USING JIG DT10085. A FRAUD-BATING SUPPORT FOR THE D5134-041/042 DAMPER SUPPORTS MUST BE USED TO POSITION THE DAMPER SUPPORTS.

ADVANCE MATING SURFACES OF THE DUTY-40-40-17-46Z DRAIN-ER SUPPORTS AND CROSS-TUBE WITH SCOTCH BRITE 7447 RED AND REMOVE RESIDUE WITH DUPONT 4105S WASH "N" WIPE DEGREASER. APPLY A 0.100" MIN THK LAYER OF PROSEAL 880 ON THE INSIDE CONCAVE SURFACE OF THE DRAIN-ER SUPPORTS. APPLY A 0.002" MIN THK LAYER OF PROSEAL 880 ON THE INSIDE CONCAVE SURFACE OF THE CROSS-TUBES.

UP- THE D6134-04317-0462. INST-ALL MS21920-25 CLAMPS AND D6123-1 CLAMP CUSHIONS WHILE WET. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL. 890 SEALANT HAS CURED FOR 72 HOURS. ENSURE THAT THE MS21920 CLAMPS ARE POSITIONED AS SHOWN IN DETAIL C.

13) PRIOR TO FINISHING, ABRASIVE MATING SURFACES OF CROSSTIE AND D6162-043 WITH SCOTCH BRITE 7447 RED AND REMOVE RESIDUE WITH DUPONT 4105S WASH N° WIPE DEGREASER. INSTALL D6162-043 WITH LAYER OF PROSEAL 888 ON INSIDE CONCAVE SURFACE 0.100" MIN THK

14) INSTALL THE D5516-1 GROUNDING CLAMP AND ASSOCIATED HARDWARE PER DETAIL "C" PRIOR TO LOCATING DB152-043 USING TOOL DT10112. TORQUE THE MS21042-3 NUT 12-15 IN.-LB. COMPLETELY SEAL THE EDGES OF THE CLAMP USING PRO

16) CARRY OUT A RESISTANCE CHECK BETWEEN THE D5515-1 GROUNDING CLAMP AND ANY UNPAINTED SECTION OF THE CROSSTUBE IN ACCORDANCE WITH AC43-13-1B CHAPTER 11. MAXIMUM RESISTANCE IS 3 MILLIOHMS.

UNDER REVIEW
URF 19-789 19.07.04 (SAD)

RELEASED

2019 MAY 07
EON 19-703

APPROVED

[illegible]



VIEW F
SCALE 2X



VIEW E-E
SCALE 2X

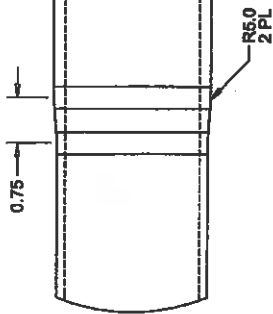
UNDER REVIEW
URF 19-799 19.07.04 (SAD)

RELEASED

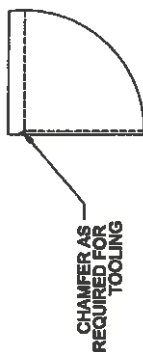
2019 MAY 07

DESIGN	AP	DART AEROSPACE LTD	REV. K
DRAWN	MM	HAWKESBURY, ONTARIO, CANADA	SHEET 5 OF 7
CHECKED	ZF	DRAWING NO.	SCALE
ENG. APPR.	JFS	D119-786-241	NTS
APPROVED	<i>[Signature]</i>	TITLE	
DE APPR.	CP	XTUBE ASSY (AW/H19 MKII AFT)	
DATE	18.09.19	COMP. BY	COMP. DATE
		AW/H19 MKII AFT	18.09.19

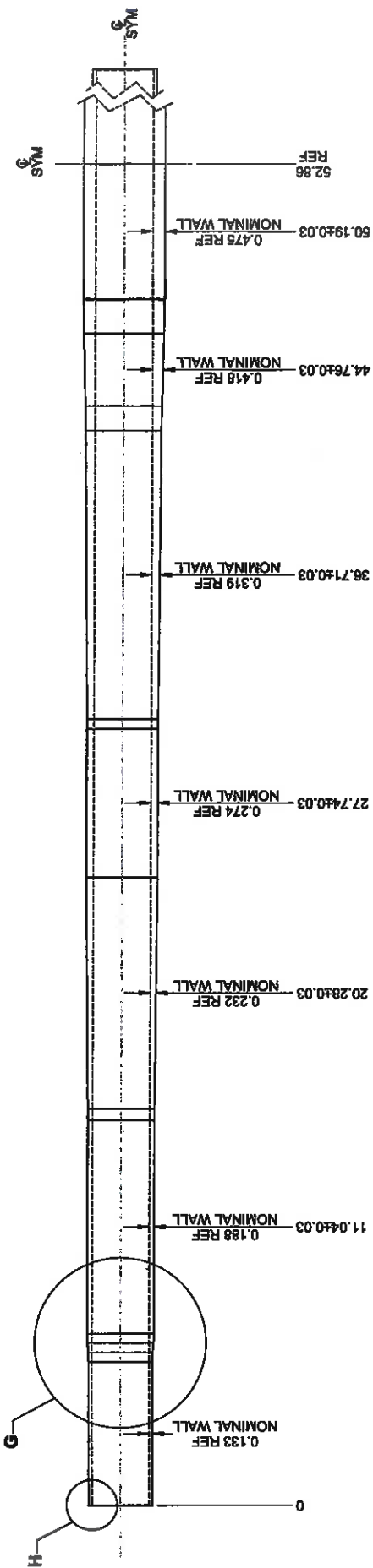
1 2 3 4 5 6 7 8



DETAIL G
SCALE 2X



DETAIL H
SCALE 4X



UNDER REVIEW
URF 19-789 19.07.04 (SAD)

D119-796-241 TRN CROSSTUBE, AFT
SUPPLEMENTAL VIEW; NOMINAL WALL THICKNESS

RELEASED

2019 MAY 07

DESIGN	AP	MMW	NO	CP	DATE	18.09.19
DRAWN	CHECKED	MFG. APPR	DE APPR			
DART AEROSPACE LTD	DART AEROSPACE LTD	DART AEROSPACE LTD	DART AEROSPACE LTD	DART AEROSPACE LTD	DART AEROSPACE LTD	DART AEROSPACE LTD
HAWKSBURY, ONTARIO, CANADA	HAWKSBURY, ONTARIO, CANADA	HAWKSBURY, ONTARIO, CANADA	HAWKSBURY, ONTARIO, CANADA	HAWKSBURY, ONTARIO, CANADA	HAWKSBURY, ONTARIO, CANADA	HAWKSBURY, ONTARIO, CANADA
DRAWING NO.	D119-796-241					
TITLE	XTUBE ASSY (AW119 MKII AFT)					
SCALE	NTS					
SHEET 7 OF 7						
REV. K						

Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐



DISPOSITION		DEPARTMENT/PROCESS					
Job: _____	Rework ☐	Skid-tube ☐	Cross tube ☐	Eng. (Non-AW) ☐	Engineering ☐		
Part No. _____	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Water Jet ☐		
	Use-as-is ☐	Large Fab ☐	Finishing ☐	Rec/Store/Packaging ☐	Supplier ☐	Quality ☐	
Date: _____	Sequence #: _____	QTY Affected: _____		MRB (Q51042) _____			
Description Work Order Deviation		Disposition					
Root Cause		FAULT CATEGORY					
Operator ☐	Pressure/Forced ☐	Contamination ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Manufacturing Process ☐	Bending ☐	Misaligned/off center ☐	Folio/Program ☐	Outside Tolerance ☐			
Equip/Tooling ☐	Crushing ☐	BOM/Route ☐	Grain Direction ☐	Drawing ☐			
Handling/Preservation ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Finish ☐			
Material ☐	Crimp/Kink/Ripple/Wave/Twist ☐	Incomplete/Unclear Instructions ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Product Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Out of Sequence ☐	Misread ☐			
Process Improvement ☐	Mislabeled ☐	Fit/Function ☐	Off-set/Set-up ☐				
Human Factors ☐	Other/Details: _____						
Completed By		Lead hand / Supervisor					
QC / QA Coordinator							